

**ABSTRACT**

**"Method and System for Bandwidth Estimation"**

5 The invention relates to a system and method for estimating the effective bandwidth on-line at a node in a communications network. The invention works by measuring the effective bandwidth and the mean rate of traffic flow for an identified type of traffic flow off-line, defining a relationship between the two measured values and storing the relationship in a database of relationships for different identifiable types of traffic flow  
10 off-line. A type of traffic flow or group of flows is identified on-line from which the mean rate of traffic flow is measured on-line which is a relatively simple measurement to make. From the database of relationships a relationship is obtained from which the effective bandwidth is estimated for the traffic flow or flows on-line. This is the simplest operation of the invention. The invention further discloses means for  
15 incorporating loss ratio and delays in the estimation of the effective bandwidth on-line.